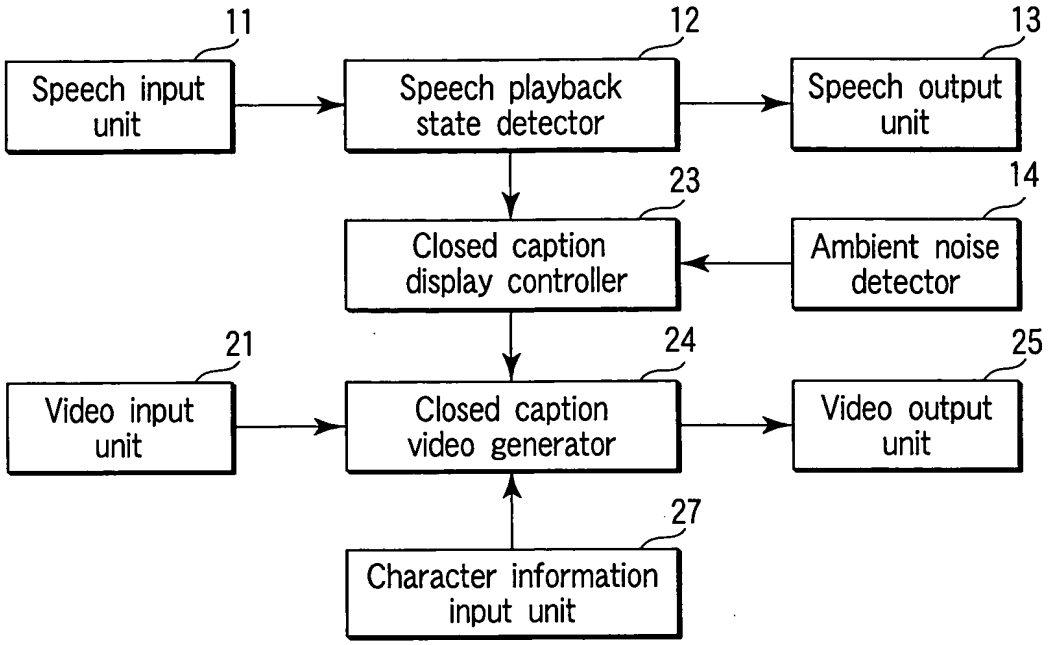


FIG. 1

Rule	Speech level	Ambient noise
1	▽	
2	▼	※
3		△

▽ : Display closed caption in less than given level
▼ : Display closed caption in less than reference level based on ※
△ : Display closed caption in not less than the given level

FIG. 2

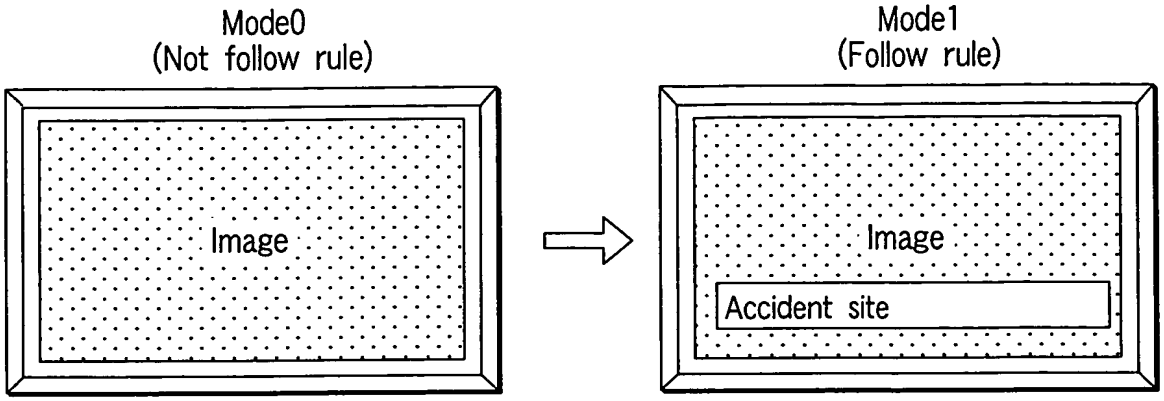


FIG. 3A

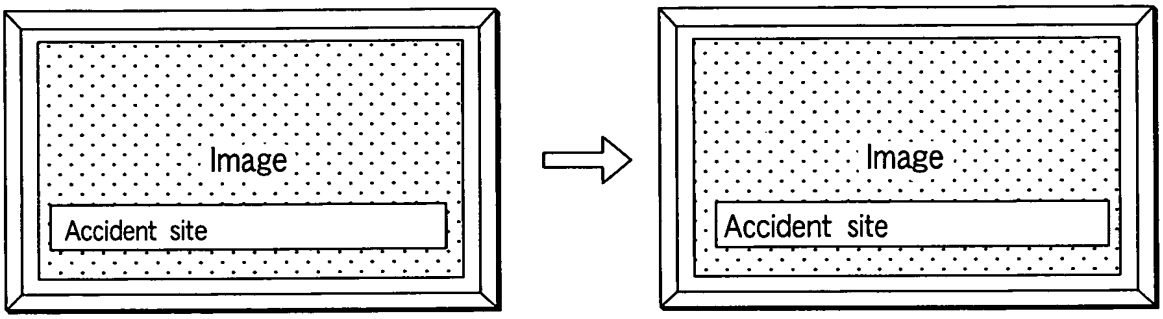


FIG. 3B

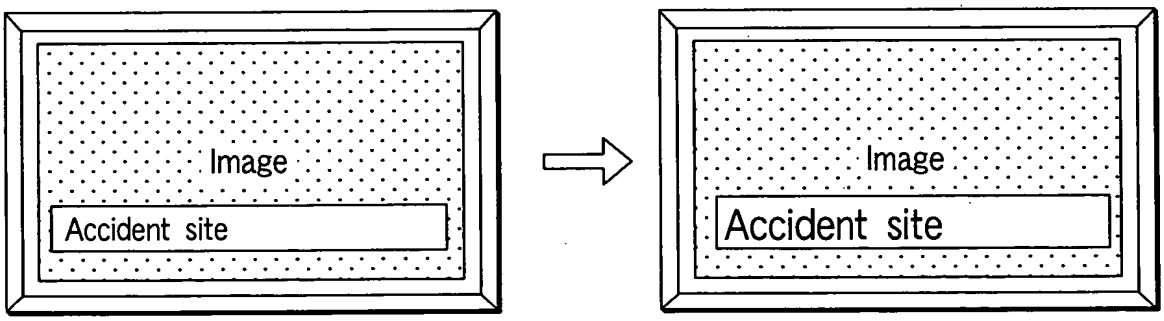


FIG. 3C

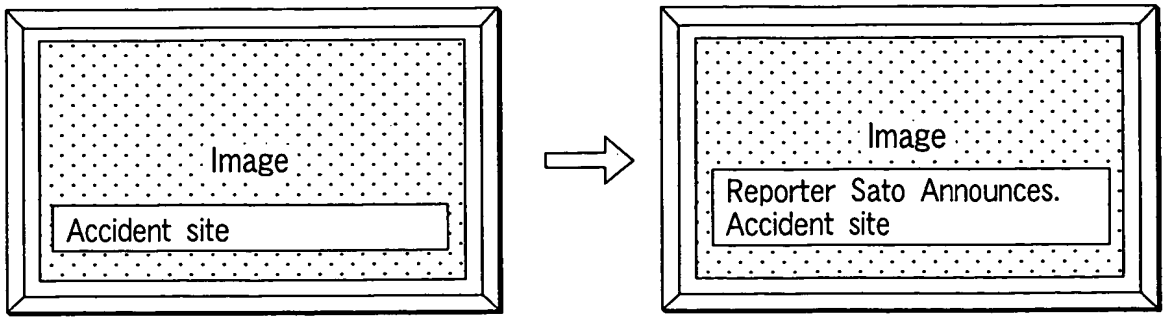


FIG. 3D

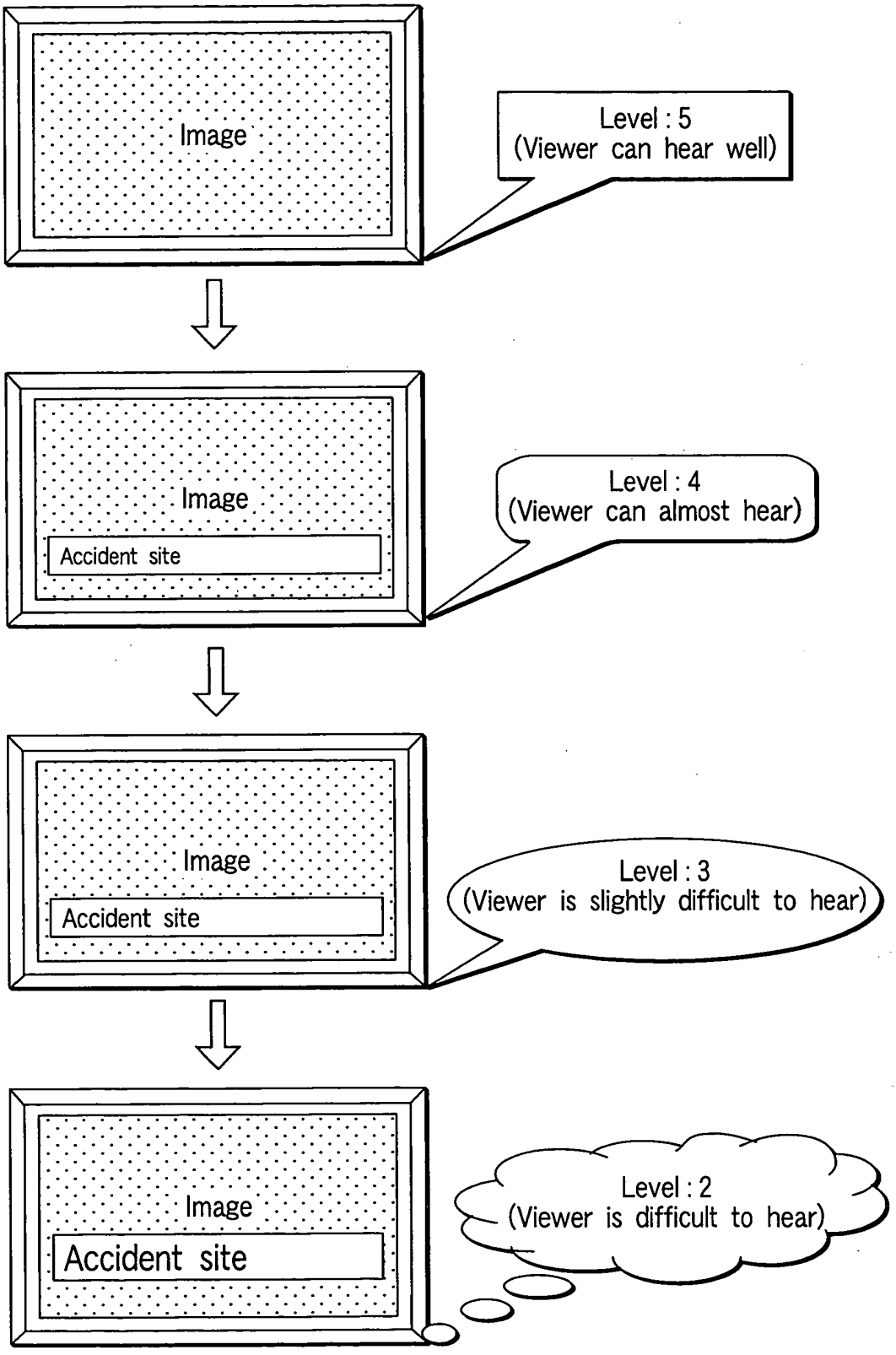


Image
Level : 5
(Viewer can hear well)
Image
Accident site
Level : 4
(Viewer can almost hear)
Image
Accident site
Level : 3
(Viewer is slightly difficult to hear)
Image
Accident site
Level : 2
(Viewer is difficult to hear)

FIG. 4

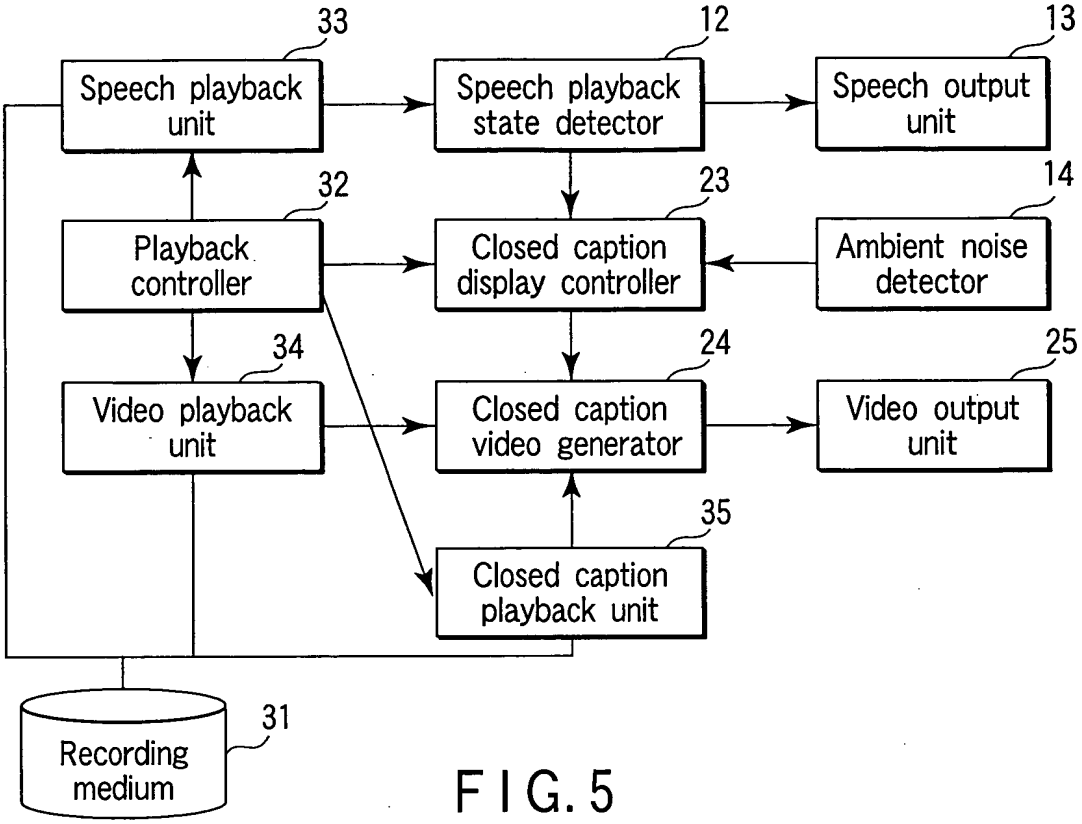


FIG. 5

Rule	Speech level	Ambient noise	Playback sound volume	Playback speed	Sound multiplex
1	▽				
2	▼	※			
3		△			
4				◇	
5				Reverse	
6				Pause	
7			▽		
8		※	▼		
9					Sub-speech

△ : ※Display closed caption in not less than given level
▽ : Display closed caption in less than given level
◇ : Display closed caption outside given range
▼ : Display closed caption in less than reference level based on ※

FIG. 6

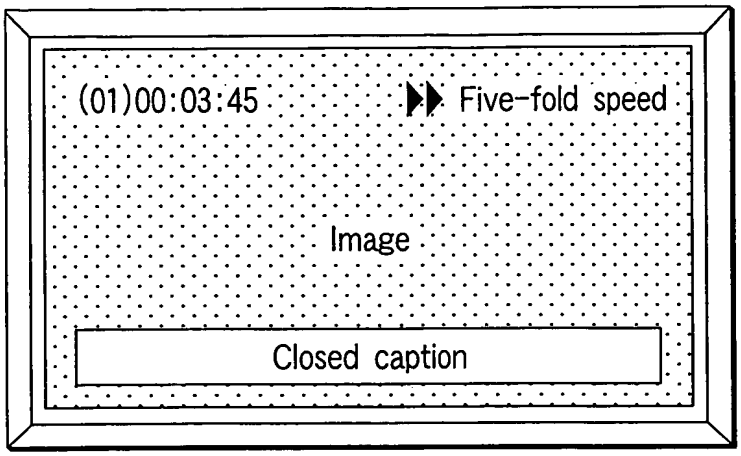

(01)00:03:45
Five-fold speed
Image
Closed caption

FIG. 7

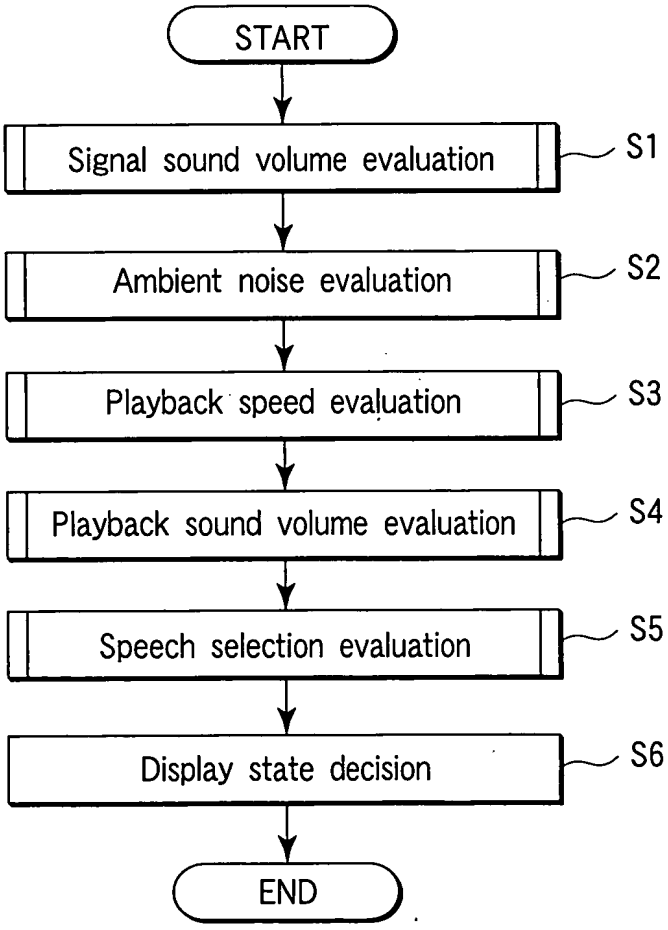

START
Signal sound volume evaluation
S1
Ambient noise evaluation
S2
Playback speed evaluation
S3
Playback sound volume evaluation
S4
Speech selection evaluation
S5
Display state decision
S6
END

FIG. 8

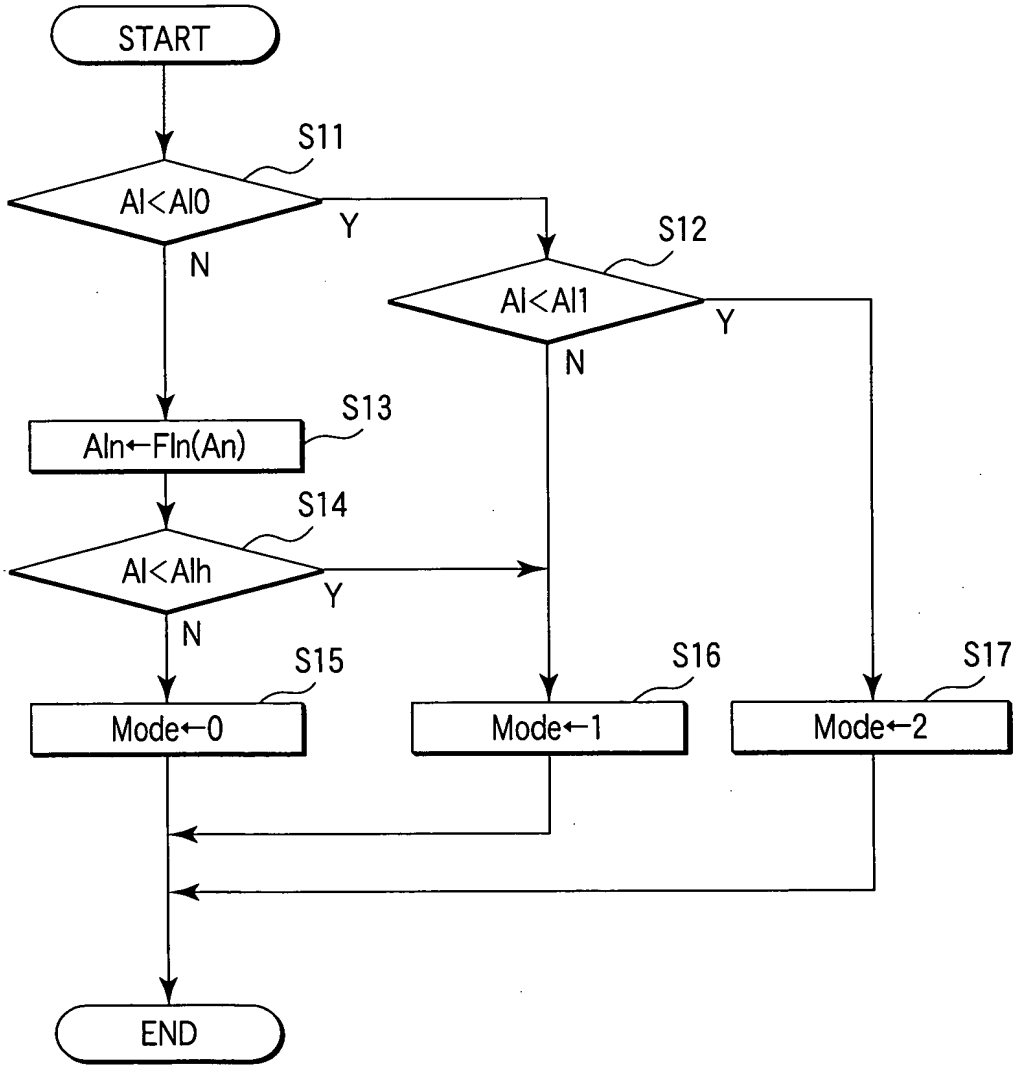

START
S11
AI<AI0
Y
N
S12
AI<AI1
Y
N
S13
AIn←FIn(An)
S14
AI<AIh
Y
N
S15
Mode←0
S16
Mode←1
S17
Mode←2
END

FIG. 9

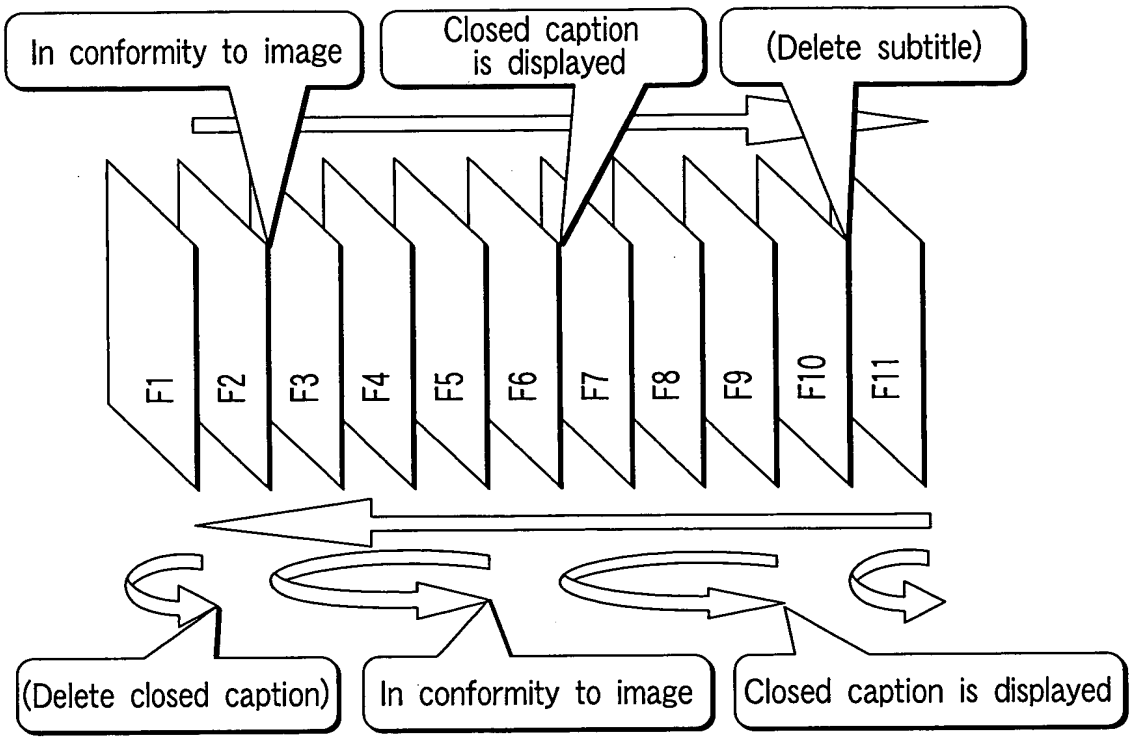

In conformity to image
Closed caption is displayed
(Delete subtitle)
F1
F2
F3
F4
F5
F6
F7
F8
F9
F10
F11
(Delete closed caption)
In conformity to image
Closed caption is displayed

FIG. 10

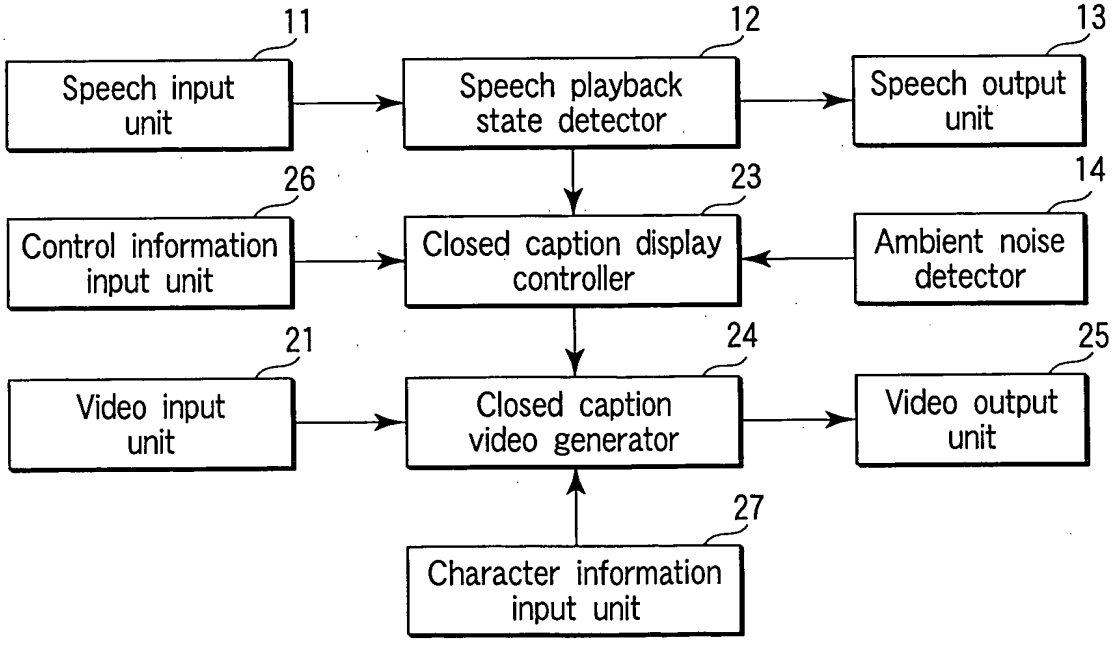

11
Speech input unit
12
Speech playback state detector
13
Speech output unit
26
Control information input unit
23
Closed caption display controller
14
Ambient noise detector
21
Video input unit
24
Closed caption video generator
25
Video output unit
27
Character information input unit

FIG. 11

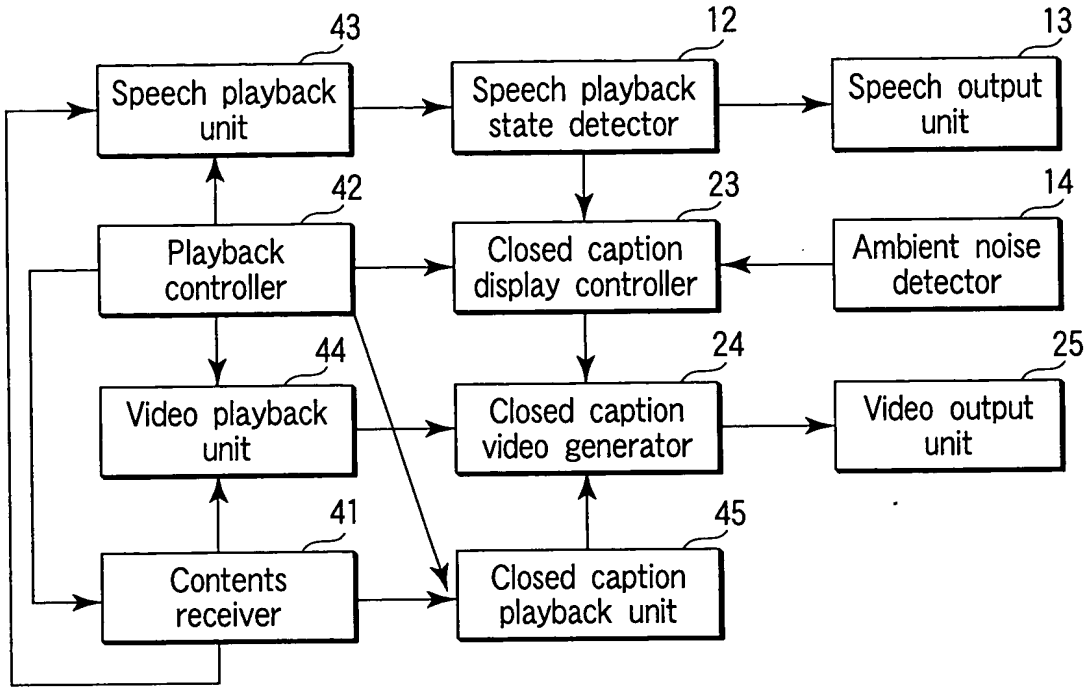
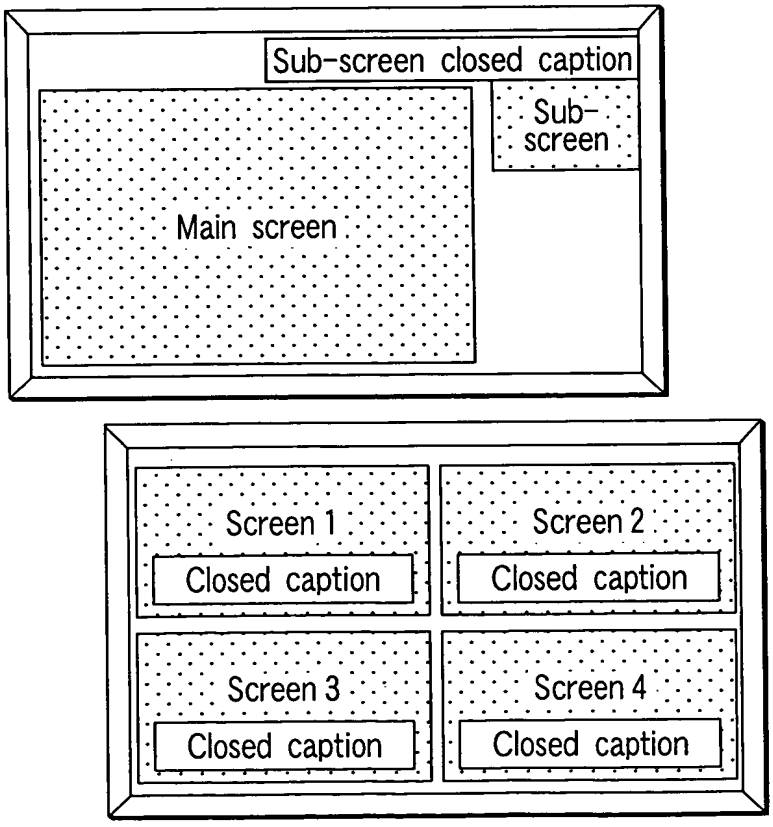

43
Speech playback unit
12
Speech playback state detector
13
Speech output unit
42
Playback controller
23
Closed caption display controller
14
Ambient noise detector
44
Video playback unit
24
Closed caption video generator
25
Video output unit
41
Contents receiver
45
Closed caption playback unit

FIG. 12

FIG. 13


Sub-screen closed caption
Sub-screen
Main screen
Screen 1
Closed caption
Screen 2
Closed caption
Screen 3
Closed caption
Screen 4
Closed caption